

1 **1. A method comprising:**
2 hashing at a first processor a first resource identifier to create a hash key, wherein said first
3 resource identifier identifies a first resource;
4 transmitting from said first processor to a second processor said hash key and a request for
5 said first resource; and
6 receiving at said first processor a second resource in response to the transmission of said hash
7 key and said request for said first resource.

1 **2. The method of claim 1 further comprising receiving at said first processor a second**
2 resource identifier in response to the transmission of said hash key and said request for said first
3 resource.

1 **3. The method of claim 2 wherein said first processor verifies that said second resource is said**
2 first resource by comparing said second resource identifier to said first resource identifier.

1 **4. The method of claim 1 further comprising transmitting from said first processor to said**
2 second processor said first resource identifier in addition to said hash key and said request for said first
3 resource.

1 **5. The method of claim 4 wherein said second processor stores said second resource and said**
2 second resource identifier in a data structure that is indexed by said hash key.

1 **6. The method of claim 5 wherein said second processor verifies that said second resource is**
2 said first resource by comparing said second resource identifier to said first resource identifier.

1 **7. The method of claim 1 wherein said hash key and said request for said first resource are**
2 transmitted from said first processor to said second processor when said all or a portion of said hash
3 key is contained in a list of valid hash keys associated with said first processor.

1 **8. An apparatus comprising:**
2 a first processor for hashing a first resource identifier to create a hash key, wherein said first
3 resource identifier identifies a first resource;
4 a transmitter for transmitting said hash key and a request for said first resource to a second
5 processor; and
6 a receiver for receiving a second resource in response to the transmission of said hash key and
7 said request for said first resource.

1 **9.** The apparatus of claim 8 wherein said receiver also receives a second resource identifier in
2 response to the transmission of said hash key and said request for said first resource.

1 **10.** The apparatus of claim 9 wherein said first processor verifies that said second resource is
2 said first resource by comparing said second resource identifier to said first resource identifier.

1 **11.** The apparatus of claim 8 wherein said transmitter also transmits to said second processor
2 said first resource identifier in addition to said hash key and said request for said first resource.

1 **12.** The apparatus of claim 11 wherein said second processor stores said second resource and
2 said second resource identifier in a data structure that is indexed by said hash key.

1 **13.** The apparatus of claim 12 wherein said second processor verifies that said second
2 resource is said first resource by comparing said second resource identifier to said first resource
3 identifier.

1 **14.** The apparatus of claim 8 wherein said hash key and said request for said first resource are
2 transmitted from said first processor to said second processor when said all or a portion of said hash
3 key is contained in a list of valid hash keys associated with said first processor.

1 **15.** A method comprising:
2 receiving a request for a first resource and a hash key that is a hashed function of a first
3 resource identifier;
4 retrieving said first resource and said first resource identifier from a data structure that is
5 indexed by said hash key; and
6 transmitting said first resource and said first resource identifier in response to said request for
7 said first resource.

1 **16.** An apparatus comprising:
2 a receiver for receiving a request for a first resource and a hash key that is a hashed function of
3 a first resource identifier;
4 a processor for retrieving said first resource and said first resource identifier from a data
5 structure that is indexed by said hash key; and
6 a transmitter for transmitting said first resource and said first resource identifier in response to
7 said request for said first resource.

1 **17.** A method comprising:

2 receiving at a first processor a first resource identifier that identifies a first resource, a hash
3 key that is a hashed function of said first resource identifier, and a request for a first resource;
4 retrieving a second resource and a second resource identifier from a data structure that is
5 indexed by said hash key;
6 verifying that said second resource is said first resource by comparing said second resource
7 identifier to said first resource identifier; and
8 transmitting said second resource to said first processor when said second resource is verified
9 as said first resource.

1 **18. An apparatus comprising:**

2 a receiver for receiving at a first processor a first resource identifier that identifies a first
3 resource, a hash key that is a hashed function of said first resource identifier, and a request for a first
4 resource;
5 a processor for retrieving a second resource and a second resource identifier from a data
6 structure that is indexed by said hash key, and for verifying that said second resource is said first
7 resource by comparing said second resource identifier to said first resource identifier; and
8 a transmitter for transmitting said second resource to said first processor when said second
9 resource is verified as said first resource.

1 **19. A method comprising:**

2 hashing at a first processor a first resource identifier to create a hash key, wherein said first
3 resource identifier identifies a first resource;
4 transmitting from said first processor to a second processor said hash key and a request for
5 said first resource when said all or a portion of said hash key is contained in a list of valid hash keys
6 associated with said first processor; and
7 receiving at said first processor said first resource in response to the transmission of said hash
8 key and said request for said first resource.

1 **20. An apparatus comprising:**

2 a processor for hashing at a first processor a first resource identifier to create a hash key,
3 wherein said first resource identifier identifies a first resource, and for verifying that all or a portion of
4 said hash key is contained in a list of valid hash keys;
5 a transmitter for transmitting from said first processor to a second processor said hash key and
6 a request for said first resource; and

7 a receiver for receiving said first resource in response to the transmission of said hash key and
8 said request for said first resource.

1 **21. A method comprising:**

2 receiving at a first processor a request for a first resource and a first hash key that is a hashed
3 function of a first resource identifier;

4 retrieving a second resource and a first portion of a second hash key from a data structure that
5 is indexed by a first portion of said first hash key;

6 verifying that said second resource is said first resource by comparing a second portion of said
7 first hash key to said first portion of said second hash key; and

8 transmitting said second resource to said first processor when said second resource is verified
9 as said first resource.

1 **22. An apparatus comprising:**

2 a receiver for receiving at a first processor a request for a first resource and a first hash key
3 that is a hashed function of a first resource identifier;

4 a processor for retrieving a second resource and a first portion of a second hash key from a
5 data structure that is indexed by a first portion of said first hash key, and for verifying that said second
6 resource is said first resource by comparing a second portion of said first hash key to said first portion
7 of said second hash key; and

8 a transmitter for transmitting said second resource to said first processor when said second
9 resource is verified as said first resource.